

Friday's Feature
By
Theresa Friday
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Falling leaves due to Hurricane Katrina

Once again, our landscapes are showing damage from a hurricane. Within a week of Hurricane Katrina, the leaves of many of our trees and landscape plants are turning brown and falling. While locally we escaped the major hurricane forces experienced by other states, we did feel Hurricane Katrina's constant and prolonged winds. High winds affect plants in several different ways.

If you live along the coast, you know that the wind carries salt spray under normal circumstances. During tropical force winds, salt is carried far inland and leaves salt deposits on plants. Salts can also be deposited by flooding or by irrigating with saline water.

Salt adversely affects plants in two ways. First, excess salts in the soil greatly reduce the water uptake by plants. Even if the soil has plenty of water, little may be available to plants if too many salts are present. Secondly, excessive salt can damage plants by causing water to move out of plants through a process called osmosis. Plants suffering from salt exposure may show burning of the margins or tips of leaves followed by defoliation and, in some cases, death of salt-sensitive species. Damage is worse on young, tender plants.



Azalea leaves showing signs of salt damage

Plants react differently to salts. Research has shown that salt tolerance is related to the plant's ability to prevent absorption of salts, its ability to tolerate an accumulation of salt or its ability to tolerate loss of water due to osmosis. In addition, some plants may be tolerant of soil salts but intolerant of salt deposits on leaves, or vice versa. These variables make it difficult to identify a plant's salt tolerance.

Salt tolerance of a plant is defined by its ability to grow under conditions of high winds, salt spray, alkaline soils and sandy infertile soils. Some salt tolerant plants include yaupon holly, oleander, saw palmetto, wax myrtle and live oak. For a complete list, review the UF/IFAS publication entitled Salt Tolerant Plants

for Florida. It's available online at <http://edis.ifas.ufl.edu/EP012> or by calling your local Extension Office.

For plants that have been exposed to saltwater, irrigate them with freshwater as soon as possible. Apply more water, and water more frequently than under normal conditions.

For inland landscapes, the withering of foliage following Hurricane Katrina is probably due to desiccation or wind burn. Wind burn occurs when plants lose moisture through their leaves more rapidly than the moisture can be taken up by the roots causing the leaves to wither and fall off.

Normally within a few weeks, the plant will send up a new generation of leaves to replace the old ones and carry on the business of capturing sunlight.

A new flush of leaves this late in the growing season is not desirable but will happen nevertheless. If this is the only damage, no special treatment is required.

Resist the urge to fertilize or encourage growth. We are approaching the dormant season and the application of high nitrogen containing fertilizers could further complicate matters.

Tip of the Week: You may notice that some fruit trees and spring flowering plants are blooming when they shouldn't be. This unseasonable flowering is stress related. Anything that causes leaves to come off earlier than normal can result in blooming out of season.

Theresa Friday is the Residential Horticulture Extension Agent for Santa Rosa County. The use of trade names in this article is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others.